Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 17. (canceled)

Claim 18. (currently amended) A method for monitoring in an animal or a human, hormonal fluctuations, ovulation prediction, ~~breathing function~~ [[,]] ~~the extent of physical fitness~~ [[,]] the progress of a pharmacological ~~therapies~~ therapy or the progress of oxygen[[-]] therapy, the method comprising:

(a) obtaining a volume of an end expiratory gas mixture from an individual animal or [[a]] an individual human,

(b) determining the amount of one or more gases contained within said volume,

(c) recording of the resultant value ~~thus~~ obtained in step (b), ~~optionally~~ together with time data and data from the individual ~~data~~,

(d) preparing prestored values for the individual,

~~(d)~~ (e) comparing measured values obtained from step (c) with ~~a table of~~ the prestored values from step (d), and

~~(e)~~ (f) generating a signal according to ~~the comparing of~~ a deviation in measured values in step ~~(d)~~ (e), said signal being stored or optionally being processed and/or edited.

Claim 19. (previously presented) The method according to claim 18, wherein the gas determined in step (b) is at least one gas selected from the group consisting of CO_2 and O_2.

Claim 20. (previously presented) The method according to claim 18, wherein the amount of the at least one gas in the end expiratory gas mixture is optically determined.

Claim 21. (previously presented) The method according to claim 20, wherein the method is for predicting ovulation and the at least one gas is CO_2.

Claim 22. (currently amended) The method according to claim 18, wherein stored measured data are compared with already stored data by a program**[[,]]** ~~wherein detection of a deviation from a predetermined value provides the signal~~.

Claim 23. (withdrawn) A device for the determination of the partial pressure of at least one gas in an end expiratory mixture of gases from an animal or a human or for predicting ovulation, the device comprising:

(a) a receiving unit for receiving a gas volume of end expiratory gas from an animal or a human,

(b) at least one measuring device for the determination of the at least one gas in the end expiratory gas volume received in the receiving unit, and for the generation of measurement signals, and

(c) a unit for display and/or storage and evaluation for recording and processing of signals received from the at least one measuring device, wherein the measured values therefrom are stored together with individual data of the animal or human being monitored.

Claim 24. (withdrawn) The device according to claim 23, which further comprises an optical measuring unit to determine the IR absorption of CO_2, wherein the measuring unit provides a signal that is stored together with time data or the identity of the animal or human, in a memory.

Claim 25. (withdrawn) The device according to claim 23, wherein the optical measuring unit is an IR measuring cell.

Claim 26. (withdrawn) The device according to claim 23, which further comprises an oxygen sensor.

Claim 27. (withdrawn) The device according to claim 23, which further comprises a device to absorb water from the end expiratory gas.

Claim 28. (withdrawn) The device according to claim 23, which further comprises a portable energy source.

Claim 29. (previously presented) The method according to claim 18, wherein the generating of a signal is used for prediction of ovulation.

Claim 30. (new) The method according to claim 18, wherein the method is for monitoring hormonal fluctuations.

Claim 31. (new) The method according to claim 18, wherein the method is for monitoring the progress of a pharmaceutical therapy.

Claim 32. (new) The method according to claim 18, wherein the method is for monitoring oxygen therapy.